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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/784,957

Applicant(s)

YOO ET AL.

Examiner

Gerald Smarth

Art Unit

2146

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/03/2004</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. The instant application having Application No. 10784957 has a total of 38 claims pending in the application; there are 3 independent claims and 35 dependent claims, all of which are ready for examination by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3, 5, 7, 8, 10, 17, 19, 21, 23, 24, 26, 33, 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Chen (2003/0005161).

Regarding claim 1, Chen teaches a method of reproducing content information stored on an interactive medium comprising (***Chen states is a functional block diagram generally illustrating one embodiment for a synchronization recovery system 300 for recovering from a failed synchronization session between a fixed computing***

device, such as an information server 310 and a mobile device 320, in accordance with the present invention; Page 3 paragraph 28 line 1-4) reproducing first data read out from the interactive medium in synchronization with second data received from a content providing server over a network; **(Chen discloses the system includes a first device associated with the first data store, a second device associated with the second data store, and a serve. The server is coupled to a storage medium on which a synchronization state is stored; Page 1 paragraph 05 line 4-8)** sensing a failure in receiving the second data; upon sensing the failure in receiving the second data, **(Chen discloses is a functional block diagram generally illustrating one embodiment for a synchronization recovery system 300 for recovering from a failed synchronization session between a fixed computing device, such as an information server 310 and a mobile device 320, in accordance with the present invention. Page 3 paragraph 28 line 1-6)** re-synchronizing the first data read out from the interactive medium with the second data received from the content providing server over the network; **(Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph 31 line 7-12)** and after a re-synchronization delay, continuing to reproduce the first data in synchronization with the second data, wherein the second data contains information for synchronization and re-synchronization. (Fig.4)

Regarding claim 3, Chen taught the method according to claim 1, as described above.

Chen further teaches wherein the information for synchronization and re-

synchronization is repeated at least three times within the second data. (*Chen*

discloses in addition, the synchronization application 342 can perform

incremental updates to the mobile device 320 to resynchronize the mobile data

322 and the server data 312 after a failed synchronization session without re-

transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph

31 line 7-12)

Regarding claim 5, Chen taught the method according to claim 1, as described above.

Chen further teaches wherein the failure in receiving the second data is due to a

disconnection or a delay of transmission of the second data over the network. (*Chen*

discloses in addition, the synchronization application 342 can perform

incremental updates to the mobile device 320 to resynchronize the mobile data

322 and the server data 312 after a failed synchronization session without re-

transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph

31 line 7-12).

Regarding claim 7, Chen taught the method according to claim 1, as described above.

Chen further teaches wherein during the re-synchronization delay the first data is

reproduced, and interpolated second data is reproduced. (*Chen discloses the audio*

reproduction stopping time 1 VOB.sub.-- A.sub.-- STP.sub.-- PTM1.sub.-- reg stores the time at which the audio is to be paused to enable resynchronization, and the audio reproduction stopping period 1 VOB.sub.-- A.sub.-- GAP.sub.-- LEN1.sub.-- reg stores the length of this pause period.; Column 26 line 17-26)

Regarding claim 8, Chen taught the method according to claim 1, as described above.

Chen further teaches wherein during the re-synchronization delay the first data is reproduced, and a previous segment of the second data is reproduced. ***(Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph 31 line 7-12)***

Regarding claim 10, Chen taught the method according to claim 1, as described above.

Chen further teaches wherein the network is the Internet. ***(Chen discloses one or more application programs 266 are loaded into memory 262 and run on the operating system 264. Examples of application programs include phone dialer programs, email programs, scheduling programs, PIM (personal information management) programs, word processing programs, spreadsheet programs, Internet browser programs, and so forth; Page 2 paragraph 23 line 1-7)***

Regarding claim 17, Chen teaches an apparatus for reproducing content information stored on an interactive medium comprising: a render reproducing first data read out from the interactive medium in synchronization with second data received from a content providing server over a network; **(Chen discloses the system includes a first device associated with the first data store, a second device associated with the second data store, and a serve. The server is coupled to a storage medium on which a synchronization state is stored; Page 1 paragraph 05 line 4-8)** and a processor sensing a failure in receiving the second data, and upon sensing the failure in receiving the second data, **(Chen discloses FIG. 3 is a functional block diagram generally illustrating one embodiment for a synchronization recovery system 300 for recovering from a failed synchronization session between a fixed computing device, such as an information server 310 and a mobile device 320, in accordance with the present invention; Page 3 paragraph 28 line 1-7)** re-synchronizing the first data read out from the interactive medium with the second data received from the content providing server over the network, **(Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph 31 line 7-12)** and after a re-synchronization delay, causing said renderer to continue reproducing the first data in synchronization with the second data, wherein said processor evaluates information for synchronization and re-synchronization contained within the second data **(fig.4). (Chen**

discloses the synchronization application 342 saves information regarding the synchronization session in a synchronization state table 344; Page 3 paragraph 30 line 16-18)

Regarding claim 19, Chen taught the apparatus according to claim 17, as described above. Chen further teaches wherein the information for synchronization and re-synchronization is repeated at least three times within the second data. ***(Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph 31 line 7-12)***

Regarding claim 21, Chen taught the apparatus according to claim 17, as described above. Chen teaches wherein the failure in receiving the second data is due to a disconnection or a delay of transmission of the second data over the network. ***(Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph 31 line 7-12).***

Regarding claim 23, Chen taught the apparatus according to claim 17, as described.

Sato discloses wherein during the re-synchronization delay the first data is reproduced, and interpolated second data is reproduced. **(Chen discloses the audio reproduction stopping time 1 VOB.sub.-- A.sub.-- STP.sub.-- PTM1.sub.-- reg stores the time at which the audio is to be paused to enable resynchronization, and the audio reproduction stopping period 1 VOB.sub.-- A.sub.-- GAP.sub.-- LEN1.sub.-- reg stores the length of this pause period.; Column 26 line 17-26)**

Regarding claim 24, Chen taught the apparatus according to claim 17, as described

above. Chen teaches wherein during the re-synchronization delay the first data is reproduced, and a previous segment of the second data is reproduced. **(Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph 31 line 7-12)**

Regarding claim 26, Chen teaches the apparatus according to claim 17, as described

above. Chen further teaches wherein the network is the Internet. **(Chen discloses one or more application programs 266 are loaded into memory 262 and run on the operating system 264. Examples of application programs include phone dialer programs, email programs, scheduling programs, PIM (personal information**

management) programs, word processing programs, spreadsheet programs, Internet browser programs, and so forth; Page 2 paragraph 23 line 1-7)

Regarding claim 33, Chen teaches an interactive medium for playing in an apparatus which reproduces first data stored on the interactive medium in synchronization with second data received from a content providing server over a network, **(Chen discloses the system includes a first device associated with the first data store, a second device associated with the second data store, and a server. The server is coupled to a storage medium on which a synchronization state is stored. The synchronization state is updated for each successful and failed synchronization session; Page 1 paragraph 05 line 3-8)** said interactive medium comprising: first data representing at least one of video data and audio data; and second data representing audio data, **(Chen discloses communication media may typically be embodied by computer readable instructions, data structures, program modules, or other data in a modulated data signal, such as a carrier wave or other transport mechanism, and includes any information delivery media; Page 1 paragraph 21 line 5-9)** wherein said second data includes information for synchronization and re-synchronization(**fig. 4**). **(Chen discloses the synchronization application 342 saves information regarding the synchronization session in a synchronization state table 344; Page 3 paragraph 30 line 16-18)**

Regarding claim 35, Chen taught the interactive medium according to claim 33, as

described above. Chen teaches wherein the information for synchronization and re-synchronization is repeated at least three times within the second data. ***(Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph 31 line 7-12)***

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 2, 4, 6, 9, 11, 12, 13, 14, 15, 16, 18, 20, 22, 25, 27, 28, 29, 30, 31, 32, 34, 36, 37, 38 rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (2003/0005161) and further in view of Sato (5884004).

Regarding claim 2, Chen taught the method according to claim 1, as described above.

Sato further teaches wherein the information for synchronization and re-synchronization includes at least one of a number of bytes per second and a number of bytes per frame.

Chen teaches claim 1 but doesn't specifically teach wherein the information for synchronization and re-synchronization includes at least one of a number of bytes per second and a number of bytes per frame.

Sato teaches wherein the information for synchronization and re-synchronization includes at least one of a number of bytes per second and a number of bytes per frame.

(Sato teaches discloses to enable this resynchronization, audio reproduction stopping times 1 and 2, i.e., Audio Stop PTM 1 in VOB (VOB.sub.-- A.sub.-- STP.sub.-- PTM1), and Audio Stop PTM2 in VOB (VOB.sub.-- A.sub.-- STP.sub.-- PTM2), indicating the time at which the audio is to be paused; and audio reproduction stopping periods 1 and 2, i.e., Audio Gap Length 1 in VOB (VOB.sub.-- A.sub.-- GAP.sub.-- LEN1) and Audio Gap Length 2 in VOB (VOB.sub.-- A.sub.-- GAP.sub.-- LEN2), indicating for how long the audio is to be paused, are also declared in the DSI packet. Note that these times are specified at the system clock precision (90 KHz); Column 26 line 17-26)(Sato also discloses when the reproducing apparatus of the digital video disk system is configured with a disk read rate of 11 Mbps, a maximum AV data compression rate of 10 Mbps, and a track buffer (stream buffer 2400) capacity of 4 Mbits, for example, a data underflow state will occur; Column 37 line 6-10)

It would be obvious to a person of ordinary skill in the art at the time of the invention to modify the teachings of Chen which was disclosed in claim 1 with the reproducing method of Sato. One of ordinary skill in the art would have been motivated to make this

modification in order to have a more efficient reproduction with a more seamless reproduction. Sato column 2 lines 65 Column 3-7.

Therefore, it would be obvious to combine Chen's reproduction system for failed synchronization to include Sato's optical disc data reproduction to have the limitations of claim 2.

Regarding claim 4, Chen taught the method according to claim 1, as described above. Chen further teaches wherein information for synchronization and re-synchronization is contained within a header portion of the second data. **(Sato discloses the pack header PKH records the time at which that pack is to be sent from stream buffer 2400 to system decoder 2500 (see FIG. 26), i.e., the system clock reference SCR defining the reference time for synchronized audio-visual data playback; Column 24 line 10-14)**

Regarding claim 6, Chen taught the method according to claim 1, as described above. Chen further teaches wherein during the re-synchronization delay the first data is reproduced, and the second data is muted and not reproduced. **(Sato discloses the decoding speed of the communications system can also become a problem when the source stream is supplied directly as occurs with live broadcasts, cable television and other dedicated line transmissions, broadcast satellites and other radio wave transmissions, and other means whereby title content is not reproduced from a recording medium on the user's side. In such cases the**

transmitted source stream must be interleaved; Column 40 line 57-65)

Regarding claim 9, Chen taught the method according to claim 1, as described above. Chen further teaches wherein the first data is at least one of video data and audio data, and the second data is audio data. ***(Sato discloses the present invention relates to a method and apparatus for interleaving a bitstream for use in an authoring system for variously processing a data bitstream comprising video data, audio data, and sub-picture; Column 1 line 9-12)***

Regarding claim 11, Chen taught the method according to claim 1, as described above. Chen further teaches wherein the interactive medium is an interactive optical disc. ***(Stato discloses means of increasing the storage capacity of conventional optical disks have been widely researched to address the recording medium aspect of this problem; Column 1 line 54-57)***

Regarding claim 12, Chen taught the method according to claim 1, as described above. Chen further teaches wherein the information for synchronization and re-synchronization includes a number of bytes per second, and the number of bytes per second is a constant value. ***(Sato discloses the from-disk transfer rate V_r is therefore constant at approximately 11 Mbps in the DVD system, while the transfer rate V_o from the buffer is variable to a maximum 10 Mbps; Column 35 line 41-44)***

Regarding claim 13, Chen taught the method according to claim 1, as described above.

Chen further teaches wherein said re-synchronization step includes: calculating an offset value for the second data to establish re-synchronization; ***(Sato discloses the audio start gap A.sub.-- STGAP is the time offset between the start of the audio and video presentation at the beginning of a VOB. This is a useful parameter for declaring seamless reproduction with the preceding encoded system stream; Column 61 line 27-30)***

sending a command requesting transmission of the second data corresponding to the calculated offset value to the content providing server; and re-synchronizing the second data transmitted in response to the command with the first data read out from the interactive medium. ***(Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph 31 line 7-12)***

Regarding claim 14, Chen taught the method according to claim 13, as described above. Chen further teaches wherein said calculating step is based on a present playing time of the first data read from the interactive medium and the number of bytes per second of the second data. ***(Sato discloses though comprising two recording surfaces similarly to the recording media shown in FIG. 7, the DVD recording***

medium RC3 shown in FIG. 8 has the recording surfaces on opposite sides of the disk, i.e., has the first data recording surface RS1 on side SA and the second data recording surface RS2 on side SB; Column 14 line 60-65)

Regarding claim 15, Chen taught the method according to claim 13, as described above. Chen further teaches wherein the offset value of the second data capable of re-synchronization is calculated by adding the present playing time of the first data to a predetermined amount of time and multiplying the result by the number of bytes per second of the second data. ***(Sato also discloses when the reproducing apparatus of the digital video disk system is configured with a disk read rate of 11 Mbps, a maximum AV data compression rate of 10 Mbps, and a track buffer (stream buffer 2400) capacity of 4 Mbits, for example, a data underflow state will occur; Column 37 line 6-10)***

Regarding claim 16, Chen taught the method according to claim 15, as described above. Chen further teaches wherein the predetermined amount of time is determined in proportion to a speed of the second data being transferred over the network. ***(Sato discloses in order to achieve the aforementioned objective, an interleaving method which for the presentation of a bitstream that is reproduced by selecting two or more data units from a bitstream comprising three or more data units contiguous on the same time-base is characterized by generating said bitstream by arranging the selected data units in a particular sequence on the same time-***

base based on the presentation time of each data unit so that it is possible to sequentially access all data units and present only the selected data units without time-base intermittence; Column 3 line 18-27)

Regarding claim 18, Chen taught the apparatus according to claim 17, as described above. Sato further teaches wherein the information for synchronization and re-synchronization includes at least one of a number of bytes per second and a number of bytes per frame. ***(Sato teaches discloses to enable this resynchronization, audio reproduction stopping times 1 and 2, i.e., Audio Stop PTM 1 in VOB (VOB.sub.-- A.sub.-- STP.sub.-- PTM1), and Audio Stop PTM2 in VOB (VOB.sub.-- A.sub.-- STP.sub.-- PTM2), indicating the time at which the audio is to be paused; and audio reproduction stopping periods 1 and 2, i.e., Audio Gap Length 1 in VOB (VOB.sub.-- A.sub.-- GAP.sub.-- LEN1) and Audio Gap Length 2 in VOB (VOB.sub.-- A.sub.-- GAP.sub.-- LEN2), indicating for how long the audio is to be paused, are also declared in the DSI packet. Note that these times are specified at the system clock precision (90 KHz); Column 26 line 17-26)(Sato also discloses when the reproducing apparatus of the digital video disk system is configured with a disk read rate of 11 Mbps, a maximum AV data compression rate of 10 Mbps, and a track buffer (stream buffer 2400) capacity of 4 Mbits, for example, a data underflow state will occur. ; Column 37 line 6-10)***

Regarding claim 20, Chen taught the apparatus according to claim 17, as described

above. Sato teaches wherein the information for synchronization and re-synchronization is contained within a header portion of the second data. **(Sato discloses the pack header PKH records the time at which that pack is to be sent from stream buffer 2400 to system decoder 2500 (see FIG. 26), i.e., the system clock reference SCR defining the reference time for synchronized audio-visual data playback; Column 24 line 10-14)**

Regarding claim 22, Chen taught the apparatus according to claim 17, as described above. Sato teaches wherein during the re-synchronization delay the first data is reproduced, and the second data is muted and not reproduced. **(Sato discloses the decoding speed of the communications system can also become a problem when the source stream is supplied directly as occurs with live broadcasts, cable television and other dedicated line transmissions, broadcast satellites and other radio wave transmissions, and other means whereby title content is not reproduced from a recording medium on the user's side. In such cases the transmitted source stream must be interleaved; Column 40 line 57-65)**

Regarding claim 25, Chen taught the apparatus according to claim 17, as described above. Chen further teaches wherein the first data is at least one of video data and audio data, and the second data is audio data. **(Sato discloses the present invention relates to a method and apparatus for interleaving a bitstream for use in an authoring system for variously processing a data bitstream comprising video**

data, audio data, and sub-picture; Column 1 line 9-12)

Regarding claim 27, Chen teaches the apparatus according to claim 17, as described above. Chen further teaches wherein the interactive medium is an interactive optical disc. ***(Stato discloses means of increasing the storage capacity of conventional optical disks have been widely researched to address the recording medium aspect of this problem; Column 1 line 54-57)***

Regarding claim 28, Chen taught the apparatus according to claim 17, as described above. Sato further teaches wherein the information for synchronization and re-synchronization includes a number of bytes per second, and the number of bytes per second is a constant value. ***(Sato discloses the from-disk transfer rate V_r is therefore constant at approximately 11 Mbps in the DVD system, while the transfer rate V_o from the buffer is variable to a maximum 10 Mbps; Column 35 line 41-44)***

Regarding claim 29, Chen teaches the apparatus according to claim 17, as described above. Chen in view of Sato teaches further teaches wherein said processor, in re-synchronizing the first data and second data, calculates an offset value for the second data to establish re-synchronization; ***(Sato discloses the audio start gap A_{sub} .-- $STGAP$ is the time offset between the start of the audio and video presentation at the beginning of a VOB. This is a useful parameter for declaring seamless***

reproduction with the preceding encoded system stream; Column 61 line 27-30)sends a command requesting transmission of the second data corresponding to the calculated offset value to the content providing server; and re-synchronizes the second data transmitted in response to the command with the first data read out from the interactive medium. (Chen discloses in addition, the synchronization application 342 can perform incremental updates to the mobile device 320 to resynchronize the mobile data 322 and the server data 312 after a failed synchronization session without re-transmitting the entire server data 312 to the mobile device 320. Page 3 paragraph 31 line 7-12)

Regarding claim 30, Chen taught the apparatus according to claim 29, as described above. Chen also teaches wherein said processor in calculating the offset value uses - a present playing time of the first data read from the interactive medium and the number of bytes per second of the second data. ***(Sato discloses though comprising two recording surfaces similarly to the recording media shown in FIG. 7, the DVD recording medium RC3 shown in FIG. 8 has the recording surfaces on opposite sides of the disk, i.e., has the first data recording surface RS1 on side SA and the second data recording surface RS2 on side SB; Column 14 line 60-65)***

Regarding claim 31, Chen teaches the apparatus according to claim 29, wherein the offset value of the second data capable of re-synchronization is calculated by said processor by adding the present playing time of the first data to a predetermined

amount of time and multiplying the result by the number of bytes per second of the second data. ***(Sato also discloses when the reproducing apparatus of the digital video disk system is configured with a disk read rate of 11 Mbps, a maximum AV data compression rate of 10 Mbps, and a track buffer (stream buffer 2400) capacity of 4 Mbits, for example, a data underflow state will occur; Column 37 line 6-10)***

Regarding claim 32, Chen taught the apparatus according to claim 31, as described above. Sato further teaches wherein the predetermined amount of time is determined in proportion to a speed of the second data being transferred over the network. ***(Sato discloses in order to achieve the aforementioned objective, an interleaving method which for the presentation of a bitstream that is reproduced by selecting two or more data units from a bitstream comprising three or more data units contiguous on the same time-base is characterized by generating said bitstream by arranging the selected data units in a particular sequence on the same time-base based on the presentation time of each data unit so that it is possible to sequentially access all data units and present only the selected data units without time-base intermittence; Column 3 line 18-27)***

Regarding claim 34. The interactive medium according to claim 33, as described above. Sato further teaches wherein the information for synchronization and re-synchronization includes at least one of a number of bytes per second and a number of bytes per frame.

(Sato teaches discloses to enable this resynchronization, audio reproduction stopping times 1 and 2, i.e., Audio Stop PTM 1 in VOB (VOB.sub.-- A.sub.-- STP.sub.-- PTM1), and Audio Stop PTM2 in VOB (VOB.sub.-- A.sub.-- STP.sub.-- PTM2), indicating the time at which the audio is to be paused; and audio reproduction stopping periods 1 and 2, i.e., Audio Gap Length 1 in VOB (VOB.sub.-- A.sub.-- GAP.sub.-- LEN1) and Audio Gap Length 2 in VOB (VOB.sub.-- A.sub.-- GAP.sub.-- LEN2), indicating for how long the audio is to be paused, are also declared in the DSI packet. Note that these times are specified at the system clock precision (90 KHz); Column 26 line 17-26)(Sato also discloses when the reproducing apparatus of the digital video disk system is configured with a disk read rate of 11 Mbps, a maximum AV data compression rate of 10 Mbps, and a track buffer (stream buffer 2400) capacity of 4 Mbits, for example, a data underflow state will occur. ; Column 37 line 6-10)

Regarding claim 36, Chen teaches the interactive medium according to claim 33, as described above. Sato further teaches wherein the information for synchronization and re-synchronization is contained within a header portion of the second data. (Sato discloses the pack header PKH records the time at which that pack is to be sent from stream buffer 2400 to system decoder 2500 (see FIG. 26), i.e., the system clock reference SCR defining the reference time for synchronized audio-visual data playback; Column 24 line 10-14)

Regarding claim 37, Chen taught the interactive medium according to claim 33, as described above. Sato taught wherein the interactive medium is an interactive optical disc. **(Sato discloses means of increasing the storage capacity of conventional optical disks have been widely researched to address the recording medium aspect of this problem; Column 1 line 54-57)**

Regarding claim 38, Chen taught the interactive medium according to claim 33, as described above. Sato further teaches wherein the information for synchronization and re-synchronization includes a number of bytes per second, and the number of bytes per second is a constant value. **(Sato discloses the from-disk transfer rate V_r is therefore constant at approximately 11 Mbps in the DVD system, while the transfer rate V_o from the buffer is variable to a maximum 10 Mbps; Column 35 line 41-44)**

Conclusion

4. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See MPEP 707.05 ©.

5. The following reference teaches execution of trial data.

US 2002/0016827

US 6363411

US 2002/0078144

US 2003/0084460

US 6580870

The examiner requests, in response to this Office action, support be shown for language added to any original claims on amendment and any new claim. That is indicated support for newly added claim language by specifically pointing to page(s) and line no(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald Smarth whose telephone number is (571)270-1923. The examiner can normally be reached on Monday-Friday(7:30am-5:00pm)est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571)272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gerald Smarth

01/30/08


JEFFREY PWU
SUPERVISORY PATENT EXAMINER